

WHAT IS CLAIMED IS:

1. A protease inhibitor comprising at least one of the substances selected from (1) to (4).

(1) redox activity protein

(2) protein with a similar activity to said redox activity protein, comprising an amino acid sequence in which one or several amino acids are deleted from, replaced with, or added to said redox activity protein

(3) genes that encode (1)

(4) genes that encode (2)

2. The protease inhibitor of claim 1, wherein said protease is selected from a group consisting of metalloprotease, serine protease, and cysteine protease.

3. A preventive or therapeutic agent for chronic obstructive pulmonary disease or for immunodeficiency syndrome comprising at least one of the substances selected from (1) to (4).

(1) redox activity protein

(2) protein with a similar activity to said redox activity protein, comprising an amino acid sequence in which one or several amino acids are deleted from, replaced with, or added to said redox activity protein

(3) genes that encode (1)

(4) genes that encode (2)

4. A preventive or therapeutic agent for chronic obstructive pulmonary disease comprising at least one of the substances selected from (5) to (8).

(5) interleukin-18 inhibitor

(6) protein with an activity of inhibiting interleukin-18, comprising an amino acid sequence in which one or several amino acids are deleted from, replaced with, or added to said interleukin-18 inhibitor

(7) genes that encode (1)

(8) genes that encode (2)

5. A preventive or therapeutic agent for pulmonary alveolar proteinosis comprising at least one of the substances selected from (5) to (8).

(5) interleukin-18 inhibitor

(6) protein with an activity of inhibiting interleukin-18, comprising an amino acid sequence in which one or several amino acids are deleted from, replaced with, or added to said interleukin-18 inhibitor

(7) genes that encode (1)

(8) genes that encode (2)

6. A preventive or therapeutic agent for cardiovascular disease comprising at least one of the substances selected from (5) to (8).

(5) interleukin-18 inhibitor

(6) protein with an activity of inhibiting interleukin-18, comprising an amino acid sequence in which one or several amino acids are deleted from, replaced with, or added to said interleukin-18 inhibitor

(7) genes that encode (1)

(8) genes that encode (2).